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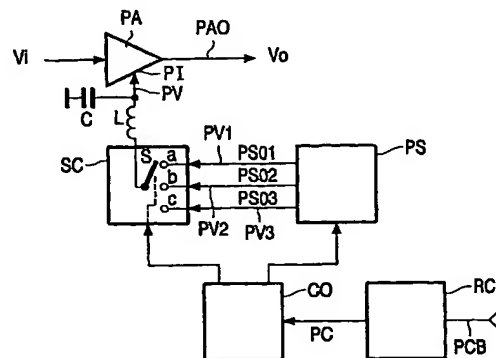
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(54) Title: POWER SAVING IN A TRANSMITTER



(57) Abstract: A transmitter comprises a power amplifier (PA) with a power supply input (PI) and an output (PAO) to supply a transmission signal (Vo) with an output power (Po). A power supply (PS) has power supply outputs (PSO1, PSO2) to supply a first power supply voltage (PV1) with a first level and a second power supply voltage (PV2) with a second level, higher than the first level. A switching circuit (SC) is arranged between the power supply outputs (PSO1, PSO2) and the power supply input (PI) to supply a selected one of the first power supply voltage (PV1) or the second power supply voltage (PV2) to the power amplifier (PA). A controller (CO) supplies a control signal to the switching circuit (SC) in response to a first power change command (PC) indicating a first desired level of the output power (Po), to supply the first power supply voltage (PV1) to the power supply input (PI). The controller (CO) supplies the control signal to the switching circuit (SC) in response to a second power change command (PC) indicating a second desired level of the output power (Po) and succeeding the first power change command (PC), to supply either the first power supply voltage (PV1) or the second power supply voltage (PV2) to the amplifier power supply input (PI) depending on values of said first desired level and said second desired level. The controller (CO) controls the power supply (PS) to vary a level of at least one of the power supply voltages (PV1, PV2) to always have available one of the power supply voltages with a level suitable for increasing the output power (Po) substantially instantaneously.

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